



SCDHEC Monitoring Well Application

1. Proposed location of monitoring wells(s)

Street Address:

City:

County:

Please attach scaled map or plat.

5. Intended purpose of monitoring well(s):

Pre-Purchase

Investigation

6. Proposed number of monitoring wells:

2. Well Owner's Name (last name, first name):

(last)

(first)

Address:

Telephone No.:

7. Proposed parameters to be analyzed (check as many that apply):

BTEX

MTBE

Naphthalene

PAHs

Metals

Nitrates

Base, Neutral & Acid Ex.

Pesticides/Herbicides

Phenols

Radionuclides

PCBs

Other

3. Property owner's name (if different from well owner):

(Last name, first name)

Address:

Telephone No.:

8. Proposed construction details (complete and attach proposed monitoring well schematics):

4. Proposed Drilling Date:(MM/DD/YYYY)

South Carolina Department of Health and Environmental Control (SCDHEC) summary of standards for monitoring well construction (per South Carolina Well Standards and Regulations R. 61-71)

Approval and License Requirements

Prior Department approval is required for the installation of all monitoring wells. The attached monitoring well approval document should be completed prior to construction of any monitoring well. A monitoring well is any well used to obtain water samples for water quality analyses or to measure groundwater levels. There are no fees for approvals. All monitoring wells must be drilled by a driller that is registered in South Carolina with the Board of Certification of the Environmental Systems Operators.

Location

Due to the nature and purpose of a monitoring well, the depth and location requirements in respect to surface water bodies, potential contamination sources, etc., are variable, and shall be approved on a case by case basis by the Department.

Construction and Material

Casing should be of sufficient strength to withstand normal forces encountered during and after well installation and be composed of material so as to minimally affect water quality analyses. Casing should have a minimum inside diameter of two inches to allow for efficient sample collection (i.e., to provide access for sampling equipment). All monitoring wells should have a cement pad at the ground surface which extends at least six inches beyond the bore hole diameter and six inches below ground surface to prevent infiltration between the surface casing and the bore hole. All monitoring wells should be grouted from a distance of 2.5 times the largest bore hole diameter above the screen to the surface with a neat cement or neat cement bentonite mixture approved by the Department. A hydrated bentonite seal may be placed above the gravel pack to prevent infiltration of grout into the gravel pack. The monitoring well intake or screen design should minimize the amount of formation materials entering the well. The gravel pack should be utilized opposite the well screen as appropriate so that parameters analyses will be minimally affected. All monitoring wells should have a locking cap or other security device to prevent damage and/or vandalism. Any monitoring well which is destroyed, rendered unusable or abandoned should be reported to the Department and be properly abandoned, revitalized or replaced as appropriate or required by permit or regulation.

Development

Monitoring wells shall be properly developed. Development shall include the removal of formation cuttings and drilling fluids from the well bore hole. Development shall be complete when the well produces water typical of the aquifer being monitored.

Reporting Requirements

A monitor well form (1903) or equivalent should be completed and submitted to the Department within 30 days after completion of the monitoring wells. The form should contain the following information:

Name and address of facility/owner;
Location of monitor well(s) on a scaled map or plat;
Driller and certification number;
Date drilled;
Driller's or geologist's log;
Total depth;
Screened interval;
Diameter and construction details;
Depth to water table with date and time measured;
Surveyed elevation of measuring point with respect to established benchmark;
Additionally, the groundwater analytical results should be submitted to within 30 days of receipt from the laboratory.

Abandonment

All monitoring wells shall be properly abandoned, when deemed appropriate by the Department. All casing and screens may be salvaged except where material has been cemented in place. Any well that acts as a source of contamination shall be repaired or permanently abandoned immediately after receipt of notice from the Department. Wells shall be filled with sand and gravel to within 20 feet of the surface and the remainder shall be filled with cement grout only. Abandonment procedures shall be by forced injection of grout or pouring through a tremie pipe starting at the bottom and proceeding to the surface in one continuous operation.

- * This summary of standards for monitoring well construction may not include a listing of all information necessary to obtain an approval to install monitoring wells. Final approval of monitoring well installation will be dependant upon the regulatory requirements for the Department program area for which the monitoring wells are to be installed.
- * Some areas of the Department may require a detailed justification of the placement of monitoring wells and the depth of monitoring well screened zones prior to granting installation approval.